memmert

SERVICE-MANUAL

WB/OB 7- 45

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Instructions for repair

This Service – Manual contains instructions for the repair of MEMMERT baths. For maintenance works please see the Operation Instructions added to each unit.
We point out that actions which require disassembly (even in part) of the unit have to be carried out by experts only.

The dismantling and dismounting of parts is described in this document down to the module level, because spare parts usually are replaced as complete modules only.

Please note the safety instructions and general directions of the Operating Instructions added to the unit.

ATTENTION!
Before removing the side panel – pull out the plug and remove the liquid of the bath !!

Separating the unit sets free raw metal edges – therefore

<u>always use gloves!</u>

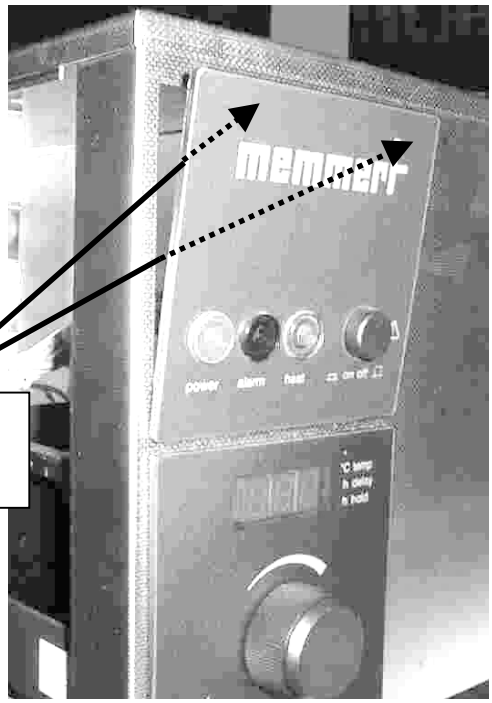
This Service – Manual describes the steps for the dismounting of the unit. Reassembly is done in reverse order, if not stated differently.

1 Removing the side panel

- Pull out the plug.
- Place the bath on a table so that the feet of the unit fits with the edge of table.
- Put out the screws at the bottom of the side panel.
- Remove the side panel downwards.

2 Changing the main switch module

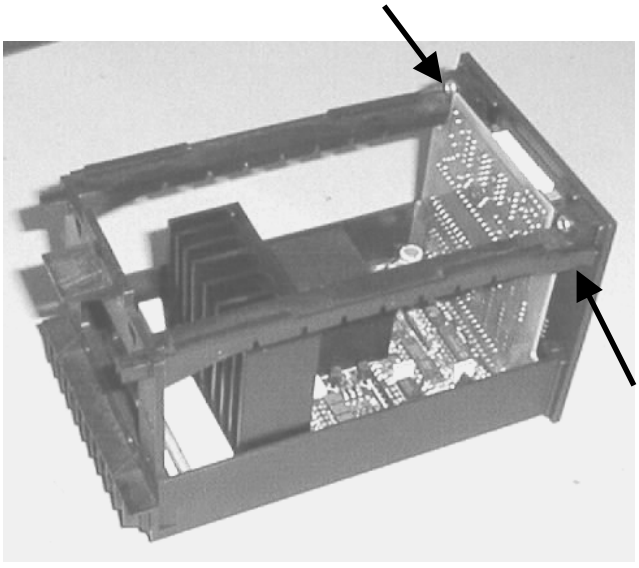
- Remove the side panel (see chap. 1).
- Disconnect the wires from the main switch panel .
- Unscrew the mounting blocks at the inside of the main switch panel (see arrows).
- Tilt front panel slighty forward and pull it out upwards.
  Assemble in reverse order.
  Please note the wiring diagram (Chap. 10).



Mounting blocks (behind the front panel)

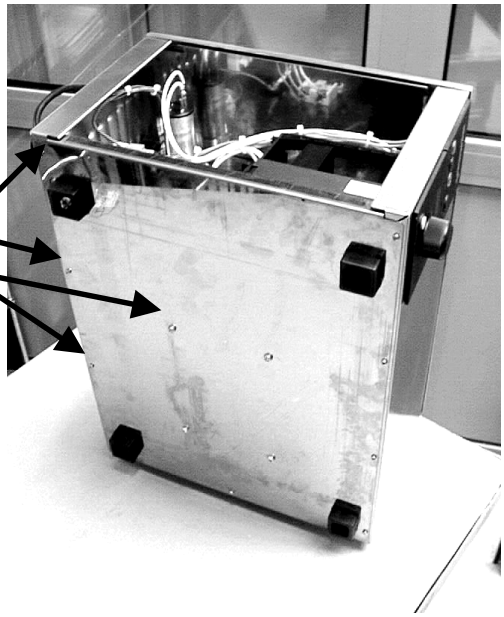
3 Changing the controller module

- Remove the side panel of the bath (see chap. 1).
- Disconnect the wires from the controller module (the wires are marked with numbers for easier assembly).
- Unlock the controller modul by pressing the two locking latches.
- Tilt controller forward and lift it slightly.
- Pull out the complete controller frame to the front.
- Mount the new controller in reverse order and connect the wires.
  Please note the wiring diagram (See chap. 10).
- After changing the controller modul a test run is necessary.
  Please note the chapter “installation waterbath“ in the operation instructions manual (Page 3).

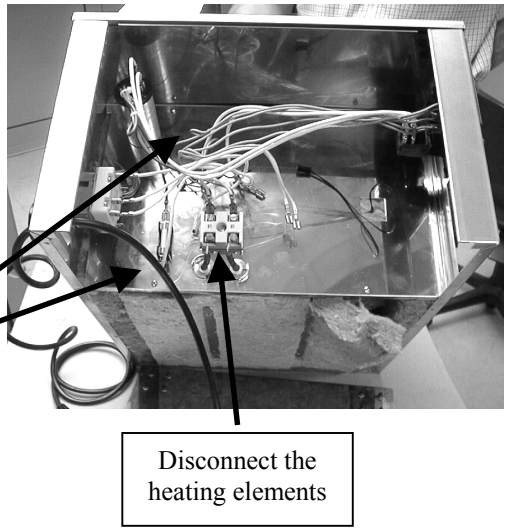


4 Changing the temperature sensor

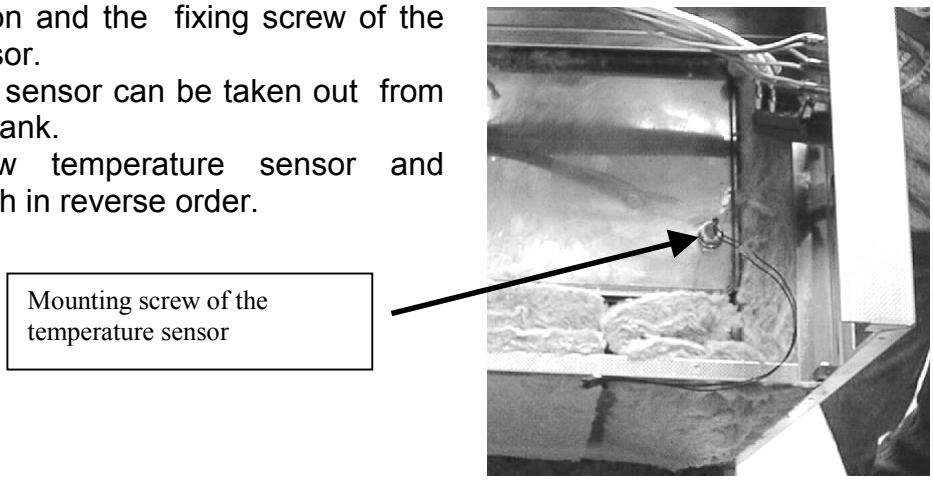
- Remove the side panel (see Chap. 1).
- Unscrew all screws at the bottom of the device (see picture).



- Take apart the controller unit and the main switch unit as described in chapter 2 and 3.
- Remove the sheet metal.
  Therefore disconnect the heating elements and unscrew all crews (see picture).

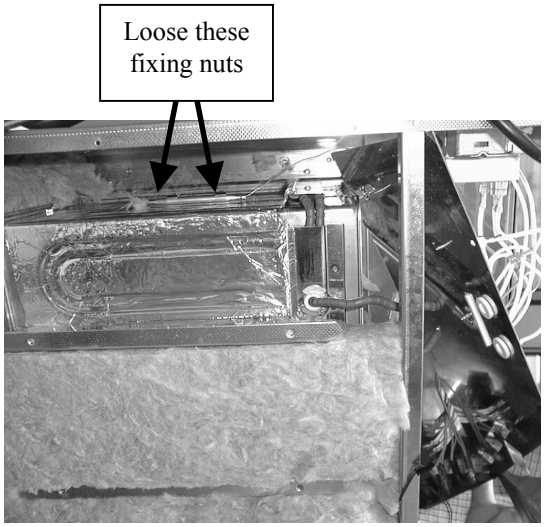


- Remove insulation and the fixing screw of the temperature sensor.
- The temperature sensor can be taken out from the inside of the tank.
- Mount the new temperature sensor and assemble the bath in reverse order.



5 Changing the temperature limiter

- For changing the temperature limiter, remove the side panel and the sheet metal of the bath at first (see chap. 1 and 4).
- Remove the insolation at the bottom and the back of the bath.
- Loose the fixing nut of the holding device for the sensor of the temperature limiter.
  Move the sensor sidewards out of the holding device.
- Dismount the fixing-screws of the temperature limiter at the back of the bath and remove the temperature limiter together with the sensor.
- Mount the new temperature limiter with the sensor in reverse way.



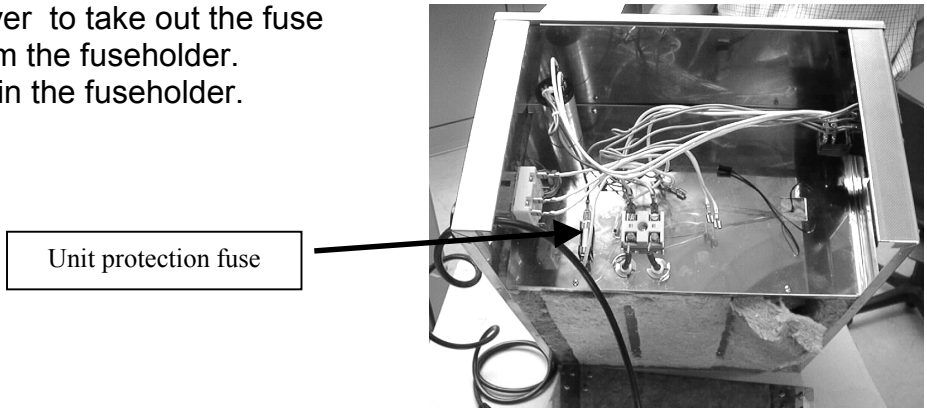
Please note, that the insulation should be mounted that there are no gaps between it !!

6 Changing the interference filter

- For changing the interference filter remove the side panel, the bottom and the sheet metal of the bath (see chap. 1 and 4).
- Loose the fixing nut of the interference filter (behind the metal sheet).
- Mount the new interference filter in reverse way.
- Complete the bath in reverse way.

7 Changing the fuse for unit protection

- The fuse for unit protection is accessible after removing the side panel (see chap. 1).
- Use a flat screw driver to take out the fuse (250V/15A flink) from the fuseholder.
- Press the new fuse in the fuseholder.



8 Changing the teflon sealing

- Open the drain plug of the pet cock.
- Take out the sealing from the drain plug by using a flat screw driver.
- Insert the new sealing in the drain plug. Close the pet cock with the drain plug.

The details in this service manual must be fully observed in order to ensure satisfactory operation.
Any warranty and claims for damage are exclude if these instructions are disregarded.

We reserve the right to make changes in technical specifications.
Dimensions subject to confirmation.

9 Our address

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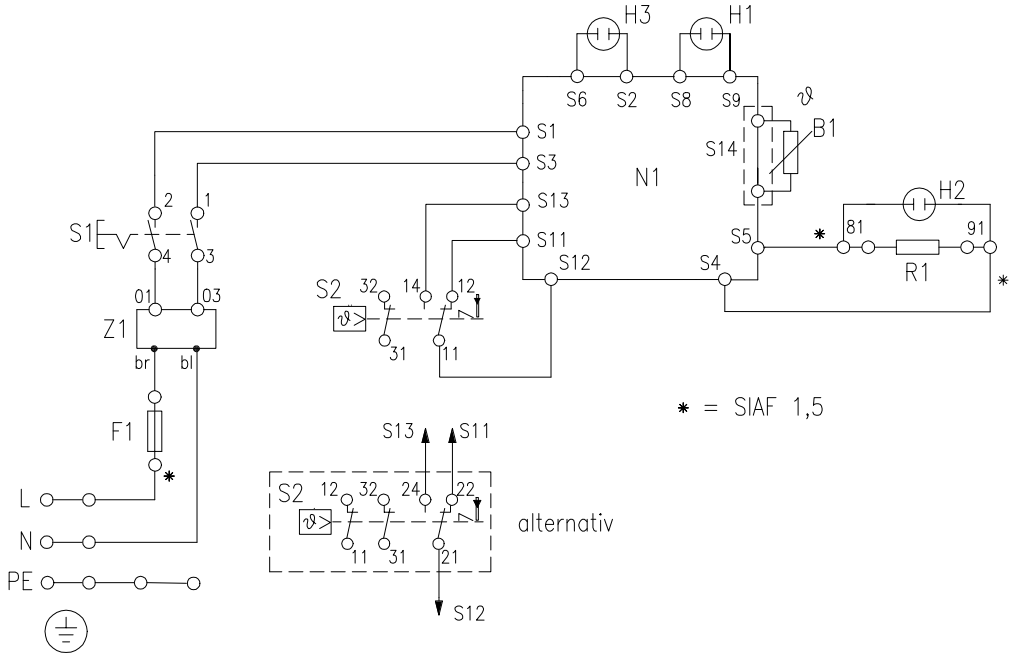
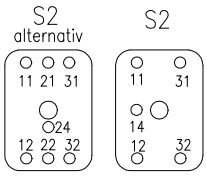
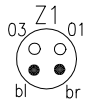


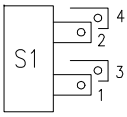
Temperaturbegrenzer
Ansicht von rückwärts
temperature limiting device back view

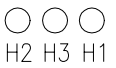


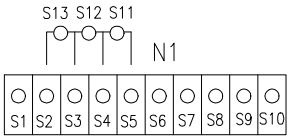


Schaltraum
Gerät in Betriebslage
PCB, wiring
unit in operating position
F1

Bedienungsfeld
Ansicht von rückwärts
control board
back view







GERATELISTE			INSTRUMENTATION		NUMMER/ NUMBER
B1	Temperaturfühler Pt100		B1	temp.-sensor Pt100	E02742
F1	Gerätesicherung 15 A		F1	appliance fuse 15 A	E02387
H1	Leuchtmelder "betriebsbereit"		H1	pilot lamp "ready for operation"	E00240
H2	Leuchtmelder "Heizung ein"		H2	pilot lamp "heating on"	E00238
H3	Leuchtmelder "Überwachung		H3	pilot lamp "safety device"	E00236
N1	Elektron. Temperaturregler 55139, 55140		N1	electronic controller for temperature 55139, 55140	B03406
S1	Hauptschalter		S1	main switch	E02296
S2	Temperaturbegrenzer	WB 135°	S2	overheat cut-out, non adjustable WB 135°	E02340
		alternativ		alternative	E02342
Z1	Entstörfilter		Z1	interference filter	E00234

Heizung heating / Modell model	7	10	14
R1 Ohm	44	44	29

Modell	gültig ab
14	I496.0601
10	I396.0201
7	I296.0601

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gepr.			

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GmbH+Co.KG
D-91126 Schwabach

WB 7, 10, 14 tb

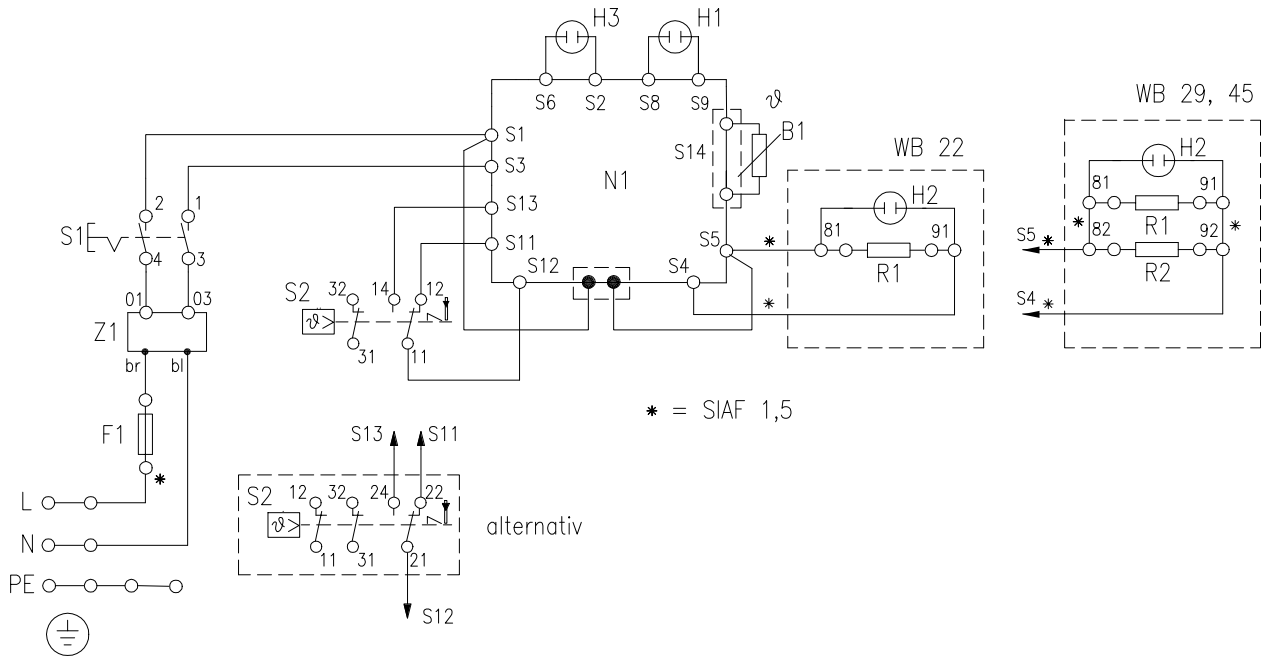
Wirkschaltplan, Geräteliste
Wiring diagram, Instrumentation

Geräte-Nr.
from no.

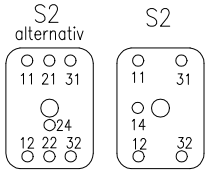
230 V 100°C

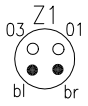
Schutzklasse nach
safety device according to
DIN 12 880 1

Zeichnungs-Nr.
plan no.
D 02322



Temperaturbegrenzer
Ansicht von rückwärts
temperature limiting device back view





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PCB, wiring
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Ansicht von rückwärts
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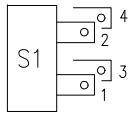
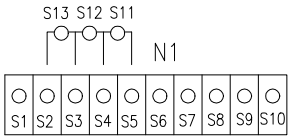


H2 H3 H1



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Heizung heating / Modell model		22	29	45
R1	Ohm	26,5	44	34,5
R2	Ohm	–	44	42

Modell	gültig ab
45	I796.0101
29	I696.0101
22	I596.0201

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WB 22, 29, 45 tb
Wirkschaltplan, Geräteliste
Wiring diagram, Instrumentation

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230 V 100°C

Schutzklasse nach
safety device according to
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Zeichnungs–Nr.
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